

VERBAL AND SOCIAL AUTOPSY STATISTICAL ANALYSIS

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METHODS

Objective:

- Conduct a descriptive analysis of the data collected through the verbal and social autopsies to gain insight into the high mortality rates found in Uttar Pradesh and to understand if differences exist in causes of perinatal death at intervention and control facilities. The purpose of this analysis is to generate hypotheses on how the BetterBirth Program/ SCC could be adapted to address causes of perinatal mortality in this context.

Sample:

The sample for these analyses included any perinatal death where one or more pause points was observed by BetterBirth staff (FADA) at 2 months or 6 months post-intervention launch (n=170). Of these, consent for interview was obtained for 161 deaths: 150 singleton babies and 11 twin babies (6 twin babies where both twins in the set died, and 5 twin babies that died while their twin lived). The dataset includes 158 mothers.

Data collection:

Cases of perinatal death that occurred during the trial were identified using the BetterBirth dataset, and of these, cases with observation and outcomes data were identified (Feb. 9, 2015 - Feb. 29, 2016). Data collectors re-contacted these BetterBirth study participants in 2017 to conduct verbal and social autopsy. Data collectors used WHO standard tools for stillbirth/neonatal verbal autopsies, modified for the local context with section on social autopsy incorporated, to collect quantitative and qualitative data on circumstances surrounding baby deaths for families that consented (n=161).

The key outcome variables for the VASA analysis were type of death (neonatal or stillbirth), and more detailed cause of death for each. Each case was coded by 2 trained physicians to assign type of death, underlying cause of death, and antecedent causes based on WHO standard software and coding protocol.

Type and cause and timing of death in intervention vs. control groups

Descriptive statistics on the causes of death were calculated with counts and proportions. A Chi-squared test, adjusted for clustering of pair and facility, was used to compare causes of death across intervention and control arms and to calculate p-values.